# § 25.865 Fire protection of flight controls, engine mounts, and other flight structure.

Essential flight controls, engine mounts, and other flight structures located in designated fire zones or in adjacent areas which would be subjected to the effects of fire in the fire zone must be constructed of fireproof material or shielded so that they are capable of withstanding the effects of fire.

[Amdt. 25-23, 35 FR 5676, Apr. 8, 1970]

# § 25.867 Fire protection: other components.

- (a) Surfaces to the rear of the nacelles, within one nacelle diameter of the nacelle centerline, must be at least fire-resistant.
- (b) Paragraph (a) of this section does not apply to tail surfaces to the rear of the nacelles that could not be readily affected by heat, flames, or sparks coming from a designated fire zone or engine compartment of any nacelle.

[Amdt. 25-23, 35 FR 5676, Apr. 8, 1970]

### §25.869 Fire protection: systems.

- (a) Electrical system components:
- (1) Components of the electrical system must meet the applicable fire and smoke protection requirements of §§ 25.831(c) and 25.863.
- (2) Electrical cables, terminals, and equipment in designated fire zones, that are used during emergency procedures, must be at least fire resistant.
- (3) Main power cables (including generator cables) in the fuselage must be designed to allow a reasonable degree of deformation and stretching without failure and must be—
- (i) Isolated from flammable fluid lines; or
- (ii) Shrouded by means of electrically insulated, flexible conduit, or equivalent, which is in addition to the normal cable insulation.
- (4) Insulation on electrical wire and electrical cable installed in any area of the fuselage must be self-extinguishing when tested in accordance with the applicable portions of part I, appendix F of this part.
- (b) Each vacuum air system line and fitting on the discharge side of the pump that might contain flammable vapors or fluids must meet the require-

ments of §25.1183 if the line or fitting is in a designated fire zone. Other vacuum air systems components in designated fire zones must be at least fire resistant.

- (c) Oxygen equipment and lines must—
- (1) Not be located in any designated fire zone,
- (2) Be protected from heat that may be generated in, or escape from, any designated fire zone, and
- (3) Be installed so that escaping oxygen cannot cause ignition of grease, fluid, or vapor accumulations that are present in normal operation or as a result of failure or malfunction of any system.

[Amdt. 25-72, 55 FR 29784, July 20, 1990]

#### MISCELLANEOUS

#### § 25.871 Leveling means.

There must be means for determining when the airplane is in a level position on the ground.

[Amdt. 25-23, 35 FR 5676, Apr. 8, 1970]

# § 25.875 Reinforcement near propellers.

- (a) Each part of the airplane near the propeller tips must be strong and stiff enough to withstand the effects of the induced vibration and of ice thrown from the propeller.
- (b) No window may be near the propeller tips unless it can withstand the most severe ice impact likely to occur.

## Subpart E—Powerplant

GENERAL

## § 25.901 Installation.

- (a) For the purpose of this part, the airplane powerplant installation includes each component that—
  - (1) Is necessary for propulsion;
- (2) Affects the control of the major propulsive units; or
- (3) Affects the safety of the major propulsive units between normal inspections or overhauls.
  - (b) For each powerplant-
- (1) The installation must comply with—
- (i) The installation instructions provided under §33.5 of this chapter; and